AMSAT News Service Weekly Bulletins
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SB SAT @ AMSAT $ANS-184.01
FIELD DAY '94 A SUCCESS!

HR AMSAT NEWS SERVICE BULLETIN 184.01 FROM AMSAT HQ
SILVER SPRING, MD JULY 2, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-184.01

'94 Field Day Operations Considered A Major Successs

Field Day '94, June 25-26th, proved once again that satellite stations and contacts are considered to be an important part of Field Day (FD) planning. Although only a few reports have started to trickle in, it is clear by listening to the downlink passbands that Field Day enthusiasts had more on their minds than making the one "perfunctory" contact to earn the 100 bonus points. They were on the "birds" to make points for their stations. The passbands on every OSCAR were jammed with stations calling "CQ FD." Below are some of the FD reports that have shown up on INTERNET and at AMSAT-NA HQ:

N6DD operated his FD station from his 29' long houseboat on the Colorado River 65 miles south-east of Las Vegas, NV. His yagi antennas were mounted atop his houseboat and were steered using the "armstrong" method. Although it was quite hot, about 120 degrees F (50 degrees C), and winds picking up right at AOS for some of the LEO OSCARs, N6DD was able to make 65 contacts with most of them coming from AO-10. N6DD says that he wished they had made more contacts but they were please with their satellite contacts in general. N6DD operated as class 2C NV. Next year he says that they will investigate an automatic antenna pointing system. Their station consisted of station setup KLM crossed yagis on VHF and UHF, a homebrew 2 element 10M beam on the elevation boom, a FT-736R + twin Mirages, and for 10M a Kenwood TS-130.

Field Day '94 for W0TWU was an adventure, he reports. Although he didn't expect to be operating with temperatures of 107 degrees F, it was, however, a good test to see if both the equipment and operators could survive! From Central Kansas they worked 298 stations on AO-10 and 301 stations on AO-13! They tried to work FO-20 but found they had a desense problem. Next year W0TWU says he plans to try Mode-S on FD.

N2NRD operated clase 1E from his back yard with his antennas mounted on a tripod to support his KLM-40CX & KLM-22C atenna combination. Although his "line-of-sight" was blocked at low elevations by his house, this caused only minor problems during N2NRD's FD effort. N2NRD's station equipment used: ICOM 271H/471H, KLM 40CX/22C, Kenpro 5400 antenna rotator combination, ICOM preamp, 70cm TE amp, Astron VS-50M power supply, Kenwood TS-830 and a 29MHz vertical/dipole HF antenna combination. N2NRD made over 250 contacts! One surprise of this FD was AO-10. N2NRD reports that AO-10 "was the best I have heard it in years. At apogee the signals were strong with very little fading. Perigee had AO-10 pass over-head at high elevations with very strong signals making for a good QSO run." N2NRD's plans for next year include operating the same sation setup but from a location that provieds an excellent view of horizon in all directions. Also, he plans to spend more time operating CW and get on the digital birds!

The FD satellite station at WM5U, the Lockheed Radio Club in Fort Worth, TX was part of a 2A NTX operation. Satellite availability was better than the operators of WM5U thought it would be. A new antenna setup provided them

with a lot of technical problems which caused them to miss the first AO-13 window completely. The heat combined with a lack of operators made operating difficult on Saturday afternoon. But they managed a bit of a come back over the remainder of the contest period. Results were a bit disappointing because they were striving to make alest 100 QSOs. They came up a bit short with a total of 94 QSOs. WM5U made 33 CW contacts and 61 voice contacts using all the available OSCARs. Their station consisted of the following equipement: Yaesu FT-736R, a Kenwood TS-140S, Landwehr Pre-Amps, Mirage B-1016G & D-1010 power amplifiers, KLM 22C & 40CX (on a 15' Create Roof Tower) with a Yaesu G-5400B w/KC Tracker/Tuner, a DSP-12, and finally a 386SX-16 IBM PC. The operators doubt that they'll rank very well in the AMSAT competition this year but do note that it was fun anyway!

The above FD '94 reports are just a few of the summaries of from the stations that operated the OSCARs under FD conditions. But they indicate that a great deal of effort went into setting up and operating the OSCARs during FD '94. AMSAT congratulates all those who worked the birds during FD '94 and looks forward to seeing more hams on the birds in FD '95.

[The AMSAT News Service (ANS) would like to thank N6DD, W0TWU, and KG5OA for these FD '94 reports.]

/EX
SB SAT @ AMSAT $ANS-184.02
HOUSTON AMSAT NET VIA SATELLITE

HR AMSAT NEWS SERVICE BULLETIN 184.02 FROM AMSAT HQ
SILVER SPRING, MD JULY 2, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-184.02

Local Houston Area AMSAT Net Can Be Heard Throughout the North America

Houston AMSAT Net originates live from Houston, TX on Tuesdays nights at 10:00 PM Central Time on 147.100 and is carried Live on Galaxy 3, Transponder 17, 5.8Mhz Audio Subcarrier

ATTENTION Satellite Enthusiasts: Want more up to date information on what his happening in the satellite world and other on neat stuff? AMSAT News Service bulletins, Space News, NASA news, Hints & Tips on working satellites and much more is available every week on the Houston AMSAT Net.

The following repeater operators carry the net live or rebroadcast it at a more convienent time. If you like the net, let your repeater trustee know. They go through a lot of trouble to bring you our net so thank them.
If your local repeater does not carry our net, ask the trustee if they would.

NETARC - New England

WA1PBJ	448.225 - 88.5	Sargents Pur, NH (White Mountains)
WA1PBJ	446.575 - 88.5	Boston, MA
KC1HF	448.225 - 88.5	Framingham, MA
WA1PBJ	442.000 + 88.5	Fitchburg, MA
K1MON	442.600 + 88.5	Portland, ME

Southern Wisconsin Repeater Group

N9KAN	443.400	Madison, WI
KD9UU	443.675	North Freedom, WI
AA9AD	53.090	Fort Atkinson, WI

Other Repeaters and Frequencies (Alphabetized by State then City)

NL7H	147.000	Anchorage, AK
KL7FZ	444.950	Anchorage, AK
WL7AML	439.250	Kodiak, AK Audio on ATV Repeater

NO6B	224.040		Pasadena, CA
N6DD	447.650		Upland, CA
WA4HX	146.880		Lakeworth, FL (West Palm Beach Area)
AJ1R	145.230		Tampa, FL
AJ1R	443.625	103.5	Tampa, FL
WB9YCZ	147.390		Noblesville, IN (N. Indianapolis)
WB9YCZ	444.125		Noblesville, IN (N. Indianapolis)
N0PMZ	146.570	Simplex	Garden City, KS
KA0PQW	223.940		Chaska, MN (Minneapolis/St. Paul Area)
WB0BWL	145.210		Columbia Heights, MN (Minneapolis Area)
WA0RCR	1.860	160 Mtrs	Wentzville, MO
WA0ZOK	146.715		Horace, ND
	443.750		Horace, ND
KB7BY	1.2G ATV Repeater		Las Vegas, NV
KD8XB	146.805		Lisbon, OH
W0KIE	88.5 FM		Tulsa, OK (Tulsa Cablevision)
VE3SF	145.230		Toronto, Ontario Canada

Compiled by: Marty Smith - WD5DZC & Bruce Paige - KB5ZRV
Check-in, questions, querys, comments during the net? Call us:
Marty Smith WD5DZC (713) 467-9870
Bruce Paige KB5ZRV (713) 933-0488

For Additions, Corrections, or Suggestions after the net?
Marty Smith WD5DZC (713) 467-9870 (Voice Message)
Bruce Paige KB5ZRV Internet: KB5ZRV@AMSAT.ORG or Packet: KB5ZRV@F6CNB

Please let us know if you are repeating our net so we can add your
repeater to this list.

[The AMSAT News Service (ANS) would like to thank WD5DZC and KB5ZRV for
this bulletin item.]

/EX
SB SAT @ AMSAT $ANS-184.04
STS-65 SAREX READY FOR LAUNCH!

HR AMSAT NEWS SERVICE BULLETIN 184.04 FROM AMSAT HQ
SILVER SPRING, MD JULY 2, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-184.04

STS-65 SAREX Mission Planned Launch of 08-JULY-94 Still On Schedule

The next Space Shuttle mission, with the Shuttle Amateur Radio Experiment
(SAREX) payload on-board, is currently slated for launch this Friday July 8
at 16:43 UTC. Note that this launch time is 23 minutes earlier than what has
been reported previously. The STS-65 Space Shuttle Columbia mision will
carry Amateur Radio operators Don Thomas, KC5FVF and Bob Cabana (license
pending) into a 28.5 degree inclination orbit for a 14 day mission. The
primary objective of this flight is to perform microgravity research
as part of the International Microgravity Laboratory (IML-02) mission.

Thirteen schools from the U.S., Japan, and Germany have scheduled ham radio
contacts with the astronauts. Ten of these school group contacts will be
performed using AMSAT's worldwide network of telebridge stations. The tele-
bridge allows students to talk to the Astronauts through a remote ground
station that is linked to the school though a phone bridge. The Goddard
Amateur Radio Club, WA3NAN expects to retransmit some of these school contacts
as part of their Shuttle Transmission activities. A limited number of schools
who wish to "easedrop" on the STS-65 school group contacts via a listen only
phone connection are encouraged to send e-mail to Frank Bauer, KA3HDO, with
your request. Your request should incluude an explanation of how you are going

to use this listen only dialog in your classroom setting. Mr. Bauer's e-mail address is ka3hdo@amsat.org.

A detailed fact sheet, follows:

STS-65 Shuttle Amateur Radio Experiment (SAREX)
Information Sheet

Mission: STS-65 Space Shuttle Columbia
International Microgravity Mission (IML-02)

Launch: July 8, 1994, 16:43 UTC

Orbit: 28.45 degree inclination

Mission Length: 14 days (Nominal)

Amateur
Radio
Operators: Donald A. Thomas, KC5FVF, and Robert D. Cabana, License Pending

Modes:FM Voice
Callsign: KC5FVF

Packet Radio
Callsign: W5RRR-1

Frequencies: All operations in split mode. Do not transmit on the downlink frequency.

Voice Freqs: Downlink: 145.55 MHz (Worldwide)
Uplinks : 144.91, 144.93, 144.95, 144.97, 144.99 MHz (Except Europe)
144.70, 144.75, 144.80 MHz (Europe only)

Note: The crew will not favor any specific uplink frequency, so your ability to work the crew will be the "luck of the draw"

Packet Freqs: Downlink: 145.55 MHz
Uplink : 144.49 MHz

Info:Goddard Amateur Radio Club, WA3NAN, Greenbelt Maryland,
SAREX Bulletins and Shuttle Retransmissions
3860 KHz, 7185 KHz, 14,295 KHz, 21,395 KHz, 28,650 KHz
and 147.45 MHz (FM)

ARRL Amateur Radio Station, W1AW, Newington, CT
SAREX News Bulletins 3990, 7290, 14,290, 18,160, 21,390, and 28,590 KHz
and 147.555 MHz (FM)

Also, bulletins available on internet, via AMSAT ANS, Compuserve, and your local PBSS.

School Group Participation: 13 school groups will participate in SAREX with pre-scheduled direct and telebridge contacts. These include 11 in the U.S., and one in Germany and one in Japan.

Prelaunch Keplerian Elements:

The following represents the Keplerian Elements for a 16:43 UTC launch time. Please note that this is 17 minutes earlier that what was originally published for the launch time. Updates will be provided later in the week. These Keps are provided by Gil Carman, WA5NOM at the Johnson Space Center ARC:

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STS-65 OMS-2
1 99965U          94189.72594477  .00027158  30948-8  84442-4 0    19
2 99965  28.4683   7.4627 0003452 327.1219 272.8160 15.90322967    17

Satellite: STS-65
Catalog number: 00065
Epoch time:      94189.72594477   =    (08-JUL-94   18:18:30.18 UTC)
Element set:     003
Inclination: 28.4683 deg
RA of node:         7.4627 deg           Space Shuttle Flight STS-65
Eccentricity: .0003452              Prelaunch Element set JSC-003
Arg of perigee:   327.1219 deg          Launch:  08-JUL-94  16:43:00 UTC
Mean anomaly:     272.8160 deg
Mean motion:   15.90322967 rev/day           Gil Carman, WA5NOM
Decay rate:     2.7158e-04 rev/day^2      NASA Johnson Space Center
Epoch rev:               2
Checksum: 17
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[The AMSAT News Service (ANS) would like to thank the ARRL and the SAREX Working Group for this information.]

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/EX
SB SAT @ AMSAT   $ANS-184.05
WEEKLY OSCAR STATUS REPORTS

HR AMSAT NEWS SERVICE BULLETIN 184.05 FROM AMSAT HQ
SILVER SPRING, MD JULY 2, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-184.05

Weekly OSCAR Status Reports: 02-JUL-94

AO-13: Current Transponder Operating Schedule:
L QST *** AO-13 TRANSPONDER SCHEDULE ***  1994 May 07-Jul 11
Mode-B  : MA   0 to MA 170 |
Mode-BS : MA 170 to MA 218 |
Mode-S  : MA 218 to MA 220 |<- S beacon only
Mode-S  : MA 220 to MA 230 |<- S transponder; B trsp. is OFF
Mode-BS : MA 230 to MA 250 |        Alon/Alat 230/-5
Mode-B  : MA 250 to MA 256 |
Omnis   : MA 250 to MA 120 |  Move to attitude 180/0, Jul 11
[G3RUH/DB2OS/VK5AGR]

MIR: A Soyuz-TM 19 was launch last Friday July 1, 1994 at 12:25 UTC from
Baikonur, Kazajstan to MIR space station, carring a Russian cosmonaut, Yuri
Malentchenco and Talgat Moussabaiev from Kazajstan.  During the next 48
hours will be orbiting Earth and then Sunday they'll dock with MIR.  During
the docking maneuvers probably the amateur rig will turn off.  [LW2DTZ]

DO-17: DO-17 still continues to transmit its voice message on a downlink
       frequency of 145.825 MHz.

FO-20: The analog transponder provides excellent signals on the passband.
       Listen for the CW beacon on 435.795 MHz.  [WD0HHU]

The AMSAT NEWS Service (ANS) is looking for volunteers to contribute weekly
OSCAR status reports.  If you have a favorite OSCAR which you work on a
regular basis and would like to contribute to this bulletin, please send
your observations to WD0HHU at his CompuServe address of 70524,2272, on
INTERNET at wd0hhu@amsat.org, or to his local packet BBS in the Denver, CO
area, WD0HHU @ W0GVT.  Also, if you find that the current set of orbital
elements are not generating the correct AOS/LOS times at your QTH, PLEASE
INCLUDE THAT INFORMATION AS WELL.  The information you provide will be of
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value to all OSCAR enthusiasts.

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